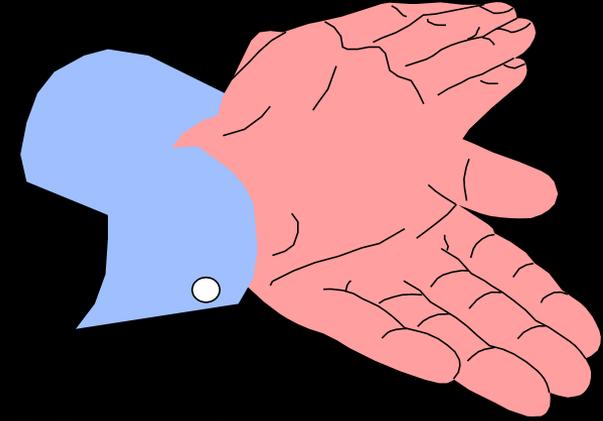


Web Portal For High School Students And Counselors

IPRO 325



Team/Resources



Sponsor

**International Engineering
Consortium**

- **Michael Janowiak**

Advisor

- **Gerard Volland**

Team Members

- **Esmeralda Jimenez**
- **Rebecca Johnson**
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Project Goals

- **Motivate high school students to consider careers in Engineering and Science.**
- **Provide information and resources through web based technology.**



Need For This Project

- There is a continuing need to provide motivational information about career opportunities to students and counselors
- **Students can benefit by:**
 - Learning about the various educational programs offered to help them meet their career goals.
 - Information on the college application process.
 - The varying student aid packages from:
 - Universities, Government, Industry, Foundations



Strength of Project Idea

- **There is a wide variety of information already available to high school students & guidance counselors from**
 - **Individual universities**
 - **Commercial organizations**
 - **Government associations**
 - **Various publications that rank institutions**



Obstacles to Overcome

- **The sheer number of sources and volume of information about colleges and careers can be quite daunting to navigate.**
 - **A single authentic, trusted and easily accessible resource would be invaluable.**
- 



Expectations

- **Seek information from**
 - College Freshmen
 - High School Counselors

to determine potential practices and trends in how the web and other resources can be used in this process.
- **Process is frustrating and stressful**
 - for students, parents and counselors in not having confidence that the best information was identified in a timely way to consider alternatives and make intelligent decisions.



Expected Results



- **Based on survey data, our team will develop a web site that can organize and provide information and services regarded as most valuable to high school students and counselors in their decision-making process about career paths**
- **And do so in an integrated way, with appropriate planning and selection tools to support the process.**



Procedures

- **Investigate why many high school students fail to consider engineering and science as career paths.**
- **Use surveys, questionnaires and tests to discover students' interests and how they might relate to science and engineering.**
- **Visit high schools to get more information on the issues that they are facing and use this information to design our website.**



Initial Meeting and Proposals

- Meeting with Dean of Undergraduate Admissions Terry Miller
- Go over plan with IEC
- Making up Questionnaires
- Setting up Appointments with High School Counselors and IIT Freshmen



Data Collection



- High School Counselors Surveyed by Telephone Interviews
 - 12 counselors
 - Why counselors?
- Freshmen Surveyed by Written Questionnaire
 - 12 students
- Responses



Questionnaire (Counselor)



- **What kind of programs** do you recommend for students to become interested in engineering and science?
- **What websites** do you recommend for finding a good listing of schools?
- **Where do you** go to find information on colleges ?
- **Which tool** do you think is most helpful in a website?
- **What would you like to see on a website** that you usually don't?
- **What would make it less complicated** in finding information regarding a school?



Questionnaire (Freshman)



- What are your **favorite subjects**?
- What do you like to **work on**?
- What or who were your **major Influences** in choosing your college major?
- Do you think your **counselor was helpful**?
- How **often** did you meet with them?
- What were the **major factor** in choosing the university?
- Did you **visit** the university?
- Did you participate in **extra curricular** activities?
- **Why did you choose your major ?**

Data Analysis



1. Request for Telephone Interviews
2. Common Comments.
3. Counselor and Student Network!
4. Honest College Requirements.

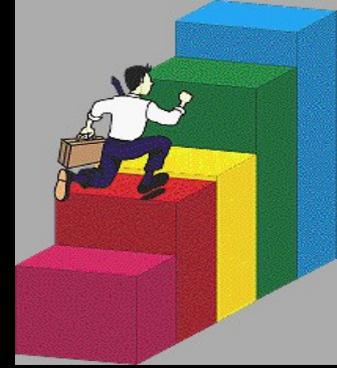
▼ Web Prototype

1. Final Prototype Design.
2. Incorporating all the Requests.
3. Time, Time, Time!





Steps Taken



- **Web Research**

<http://www.discoverengineering.org>

A great site that describes what each type of the engineering field does in the real world.

<http://www.high-school-high-tech.com>

Promoting Science, Engineering, and Technology careers for High Schools students with disabilities.

<http://www.jets.org/4stud.htm>

Provides help in learning about engineering, finding a college, tips on courses that can be taking while still in high school and suggestions for how to get involved with student associations focused on a particular engineering discipline. Also provides help to parents and teachers.

<http://www.asee.org/precollege>

A guide for high school students interested in engineering and engineering technology careers.

<http://www.voyager.net/mspe/CareerInfo/CareerForDayAfterTom2.html>

Outlines opportunities and challenges that the practice of engineering offers. Also answers questions such as: What is engineering? What do engineers do? How can a student explore an interest while in high school? Also provides college catalogs and brochures.

<http://www.bonamypublishing.com/chapter1.html>

Answers questions such as: What is engineering? Is there an engineer inside you? What can an engineering degree can do for you?



Our Website

- **Major engineering fields:**
Detailed descriptions
- **Counselors' Bulletin Board:**
Allowing communication between high school counselors and college counselors.



Our Website (continued)

- **Course listing** for different Engineering fields: a reference guide for high school students.
- **Top 20 colleges**
- **GPA and SAT requirements** of different universities, creating tier-based listing.



Our Website (continued)

- **Listing of the different ranks of the universities.**
 - **Contact Information including phone number and email addresses.**
 - **Beta Website**
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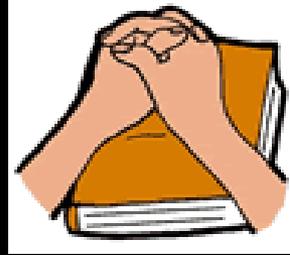


Future Work



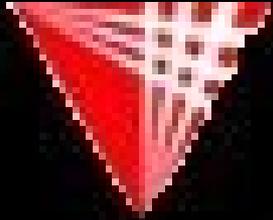
The web page will need to go into further development in order to expand the usage of this website. The following are proposed goals:

- **Streaming video** of current engineering students and working professionals, describing their experiences, projects, and faults they have taken to get where they are.
- **Going global**, meaning expanding the resources provided by the website in order to meet the needs of International students.



Conclusion

- **As a team we faced different situations that are involved in problem solving.**
 - realize what the problem was
 - formulate different tasks that were necessary to solve it
 - we had to overcome setbacks
 - Short comments from students
 - Not being able to meet with the counselors in person
 - Not enough time
- We hope that our work will prove beneficial to High School students and inspire them to choose Engineering and Science as their profession.
- To phrase our experience we may say, the team realized that ***“The only place success comes before work is in the Dictionary.”***



Web Portal for High School Students And Counselors

QUESTIONS???